

PATENT
Reply under 37 CFR 1.116
EXPEDITED PROCEDURE
Group 1731

AMENDMENT(S) TO THE SPECIFICATION

Please substitute the following paragraph for the paragraph beginning on page 12, line 21:

The present invention can be utilized advantageously to influence at least one of the following properties of the fiber material web:

- Forming
- Tear length ratio RL L/Q, where RL L/Q is the ratio of a longitudinal section of a tear to a transverse section of the same tear.

The aforementioned Tear ratio is especially significant with sack papers and format-type papers like wood-free copying paper.

Please substitute the following paragraph for the paragraph beginning on page 9, line 9:

As already mentioned, instead of the product characteristic that is to be influenced, a characteristic that correlates well with the target characteristic can especially be acquired and be included in the adjustment. The following examples are cited: Most of the strengths such as tear strength, SCT and bursting pressure cannot be captured in-line since this would be associated with destructive test procedures. On the basis of, for example the fiber orientation, the respective target strength can be calculated based on correlations and can, if necessary, be corrected through an adjustment. If necessary, the adjustment can consider several in-line measured variables, i.e. the oven dried FbM profile, where FbM is the mass per unit area of the fiber web in g/m².

Please substitute the following paragraph for the paragraph beginning on page 9, line 17:

In certain instances it is also advantageous if at least one control algorithm is incorporated

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into the closed control loop, for mapping, especially with an appropriate interface control. As already mentioned, any of the previously discussed dewatering, forming and/or wire guiding elements can be utilized as a respective final control element. The angle of attack of the dewatering, forming and/or wire guiding elements is defined as the angle between the longitudinal direction of the dewatering, forming and/or wire guiding elements and the direction of travel. Moreover, the angle of attack of the dewatering, forming and/or wire guiding elements can be adjustable relative to the direction of web travel, in fact especially in the plane centered by the machine direction and machine cross direction. An intervention is therefore possible, for example, through adjustment of the angle of attack.

Please substitute the following paragraph for the paragraph beginning on page 18, line 3:

Figs. 4a-4c each show two wires 3.1, 3.2, viewed in direction of wire travel S (dimensional arrow), of a gap-former (not illustrated), whereby the fibrous suspension is run between the two wires 3.1 and 3.2. A gap-former of this type (Twin Wire Former) is known, for example from the applicant's German prior art document ~~E 40 05 420 A1~~ DE 40 05 420 A1 (PB04713); the disclosure of this prior art document is herewith declared to be part of this description and the gap-former will, therefore, not be discussed in further detail. Fig. 4a shows wire 3.1 being carried over a rotating element 9 that is in the embodiment of roll 10, shown as a sectional view. The surface of roll 10 can be grooved or spirally grooved. In contrast, wire 3.2 is carried by way of plate 6 or strip 4.1 that are structured 5 with nubs 8. Rotating element 9 and wire 3.1 can rotate or move at the same, or at different speeds (synchronism, forward motion, after-running) in the same, or in opposite direction. Rotating element 9 can also rotate at crawling speed, possibly even with an installed cleaning unit that however, is not illustrated.

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Please substitute the following paragraph for the paragraph beginning on page 22, line 7:

Fig. 22 is a schematic illustration of a purely exemplary layout of a paper machine whereby elements for cross profiling are provided in wire section 58. In the present example fibrous suspension 62 that is delivered from headbox 60 is brought onto wire 64 that, in wire section 58 is routed over forming board 66, suction box 68 together with the relating elements for controlling the cross profile, for example, at least one foil box 70, at least one suction box 72 and one suction couch roll 74. Following this wire section, the fiber material web, or paper web runs through press section 76, dryer section 78 and smoothing device 80 in order to be subsequently delivered to roller 82. Scanners 84 that are connected with control unit 86 are provided in the area of suction couch roll 74, press section 76, dryer section 78, smoothing device 80 and for example, also roller 82. A valve arrangement 88 through which various sections of suction box 60 68 can be treated with vacuum via vacuum generator 90 is triggered by control unit 86. Accordingly, controlling the cross profile is possible, as already previously described.